

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 1, 6, 8, 12, and 13 have been amended, and claims 25 and 26 have been added. No new matter is being presented, and approval and entry are respectfully requested.

Claims 1-26 are pending and under consideration.

REJECTION UNDER 35 U.S.C. §102:

In the Office Action, at page 2, item 2, the Examiner rejected claims 1, and 6-13 under 35 U.S.C. §102(b) as being anticipated by Hayes et al., (US 2002/0123312 – hereinafter Hayes). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

Amended, independent claim 1 recites: "...a first radiator connected to the ground plane and extending in a first direction, spaced from the ground plane; and a second radiator connected to the first radiator, spaced from the first radiator, extending, unsupported, in the first direction, and having an end connected to an antenna cable."

And amended, independent claim 8 recites: "...a first radiator connected to the ground plane and extending in a first direction, with a predetermined separation from the ground plane; a second radiator connected at a first end thereof to the first radiator and extending, unsupported, in the first direction; and an antenna cable connected to a second end of the second radiator."

Hayes discloses a multiple frequency band inverted F antenna 41 having a ground plane 43 and first and second branches is 42a and 42b. Each of the first and second branches 42a and 42b are connected to the ground plane 43 by a signal feed 44 and a ground feed 45. Additionally, a second antenna 46 is connected to the inverted F antenna 41, either parasitically, or directly. (See Hayes, at FIGS. 4A, 4B, 6, and 7, and paragraphs 34, 35, 40, and 46).

Applicant respectfully submits that Hayes neither discloses nor suggests "...a first radiator connected to the ground plane and extending in a first direction, spaced from the ground plane; and a second radiator connected to the first radiator, spaced from the first radiator, extending, unsupported, in the first direction, and having an end connected to an antenna cable."

And amended claim 12 recites: "...wherein: the ground plane, the first radiator, and the second radiator are integrally formed of a single piece of material."

Hayes discloses the conductive element 42 being formed of a copper sheet or a copper layer on a dielectric substrate, but there's no discussion as to materials of the ground plane 43, let alone a disclosure or inference that the conductive element 42 and ground plane are "integrally formed of a single piece of material."

Accordingly, Applicant respectfully submits that independent claims 1 and 8 patentably distinguish over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicant respectfully submits that claims 2-7, which ultimately dependent from independent claim 1, and claims 9-14, which depend from independent claim 8, should be allowable for at least the same reasons as claims 1 and 8, as well as for the additional features recited therein.

REJECTION UNDER 35 U.S.C. §103:

In the Office Action, at page 5, item 4, the Examiner rejected claims 2, 15-20, and 24 under 35 U.S.C. §103(a) as being unpatentable over Hayes in view of Masaki et al., (US 6,388,627 – hereinafter Masaki). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

In the Office Action, at page 7, item 5, the Examiner rejected claims 4, 5, and 23 under 35 U.S.C. §103(a) as being unpatentable over Hayes in view of Masaki, and further in view of Tsai (US 6,486,834 – hereinafter Tsai). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

In the Office Action, at page 9, item 6, the Examiner rejected claims 3, 21, and 22 under 35 U.S.C. §103(a) as being unpatentable over Hayes in view of Masaki, and further in view of Hachiga (US 5,896,109 – hereinafter Hachiga). The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

In the Office Action, at page 10, item 7, the Examiner rejected claim 14 under 35 U.S.C. §103(a) as being unpatentable over Hayes in view of Hachiga. The reasons for the rejection are set forth in the Office Action and therefore not repeated. Applicant traverses this rejection and respectfully requests reconsideration.

As a general matter, to establish a prima facie obviousness rejection, the Examiner needs to provide both the existence of individual elements corresponding to the recited limitations, and a motivation to combine the individual elements to create the recited invention. (See MPEP, at 2143.03, and 2143.01). Should the Examiner fail to provide evidence that the individual elements exist in the prior art, or that the motivation exists in the prior art or in the knowledge generally available to one of ordinary skill in the art, then the Examiner has not provided sufficient evidence to maintain a prima facie obviousness rejection of the claim. (See MPEP, at 2143.03, and 2143.01). Thus, the burden is initially on the Examiner to provide evidence as to why one of ordinary skill in the art would have been motivated to combine the individual elements to create the recited invention, and to demonstrate that this evidence existed in the prior art or in the knowledge generally available to one of ordinary skill in the art. (MPEP 2143.01).

As motivation to combine a Masaki and Hayes, the Examiner recites the several advantages of F antennae and asserts that they are highly suitable for such a device like a portable computer where users want to have wireless access to the Internet, and where the antenna should be small enough so that it does not require a larger housing. But Masaki discloses an inverted F antenna as an exemplary antenna, and thus already realizes all the benefits of an F antenna asserted by the Examiner. (See Masaki, at FIG. 8, and col. 7, lines 7-8).

The Examiner has provided no evidence whatsoever as to why one of ordinary skill in the art would have been motivated to combine the inverted F antenna of Hayes with the device disclosed in Masaki rather than the inverted F antenna of Masaki.

As stated in the MPEP, "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." (See MPEP 2143.01).

Accordingly, Applicant respectfully submits that the Examiner has failed to provide evidence that the motivation to combine Hayes and Masaki in the manner suggested by the Examiner exists in the prior art or in the knowledge generally available to one of ordinary skill in the art, and thus, that the Examiner has not provided sufficient evidence to maintain a prima facie obviousness rejection of the claims.

As such, Applicant respectfully submits that the combination does not disclose or suggest the invention as recited in claims 15-24, and that there is insufficient evidence of a

motivation that existed in the prior art and which would have motivated one of ordinary skill in the art to make the combination in the manner set forth in the office action.

Accordingly, Applicant respectfully submits that independent claim 15 patentably distinguishes over the cited art, and should be allowable for at least the above-mentioned reasons. Further, Applicant respectfully submits that claims 16-24, which ultimately depend from independent claim 15, should be allowable for at least the same reasons as claim 15, as well as for the additional features recited therein.

NEW CLAIMS:

Applicant respectfully submits that for at least similar reasons as those stated in the section regarding the rejection under 35 U.S.C. §102 new claims 25 and 26 patentably distinguish over the cited art and should be allowable.

CONCLUSION:

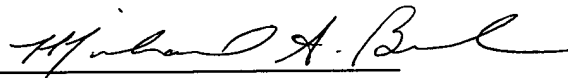
In accordance with the foregoing, Applicant respectfully submits that all outstanding objections and rejections have been overcome and/or rendered moot, and further, that all pending claims patentably distinguish over the cited art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for a telephone interview to discuss resolution of such issues.

If there are any underpayments or overpayments of fees associated with the filing of this Amendment, please charge and/or credit the same to our Deposit Account No. 19-3935.

Respectfully submitted,
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